Section 12: Career Exploration and Middle School 2006-2007

CTE in Middle School:

- Course Titles and Descriptions
- Credit for High School Courses Taught in Middle School

Section 12: Career Exploration in Middle School

Students in middle school have the opportunity to gain a foundation in technical fields and explore careers through a variety of career and technical courses described below. These experiences will help students make sound choices related to their academic and elective program of studies in high school.

Agricultural Education

Introduction to Agriscience 8002
Grade Level: 6 (18 weeks or less)
Middle school students develop an awareness of the relationships between agriculture and science. Major concepts covered in the course include awareness of agriculture, the world of work, agribusiness careers, human relations, and scientific principles applied in agriculture.

Agriscience Exploration 8003
Grade Level: 7 (18 weeks)
Students explore science as it relates to agriculture and develop an understanding of human relations, communication, the importance of agriculture to the economy, and key scientific terms related to the field of agriculture.

Agriscience and Technology 8004
Grade Level: 8 (18 or 36 weeks)
Through laboratory activities, students apply scientific principles to the field of agriculture, including plants, animals, and ecology/conservation. The course introduces students to biotechnology as it relates to agriculture.

Business and Information Technology

FOUNDATION COURSES

Computer Solutions 6609
Grade Levels: 7, 8 (6/9/12/18 weeks)
Computer Solutions 6610
Grade Levels: 7, 8 (36 weeks)
Students use the computer as a problem-solving tool to complete a variety of projects. Students participate in team-building activities that include both academic and business competencies. Basic touch keyboarding instruction is provided early in the course.

Keyboarding 6150
Grade Levels: 6, 7, 8 (6/9/12/18 weeks)
This course is designed for middle school students to develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce personal, educational, and professional documents.

Make It Your Business 6110
Grade Levels: 6, 7, 8, 9 (6/9/12 weeks)
Make It Your Business 6111
Grade Levels: 6, 7, 8, 9 (18 weeks)
Students are provided opportunities to run a small group or class business based on their own design for providing a service or product needed at their school. Students learn business terminology, basic entrepreneurship concepts, and fundamental business operating principles in this course. Design of course content provides for interdisciplinary instruction.

Career Pathways 9070/9071/9072
Grade Levels: 6-12
These career exploration offerings are recommended for Business and Information Technology and Family and Consumer Sciences students. See Section 8: Career Connections for course descriptions.

MIDDLE/SECONDARY

The following courses are allowed in both middle and/or high school but may be appropriate for middle level students. If the local school division wishes to offer the courses for credit, they must be taught exactly as the high school courses are taught.

See Section 2: Business and Information Technology for additional information about these courses.

Computer Applications 6611
Grade Levels: 7, 8, 9, 10 (36 weeks)
Computer Applications 6617
Grade Levels: 7, 8, 9, 10 (18weeks)
Prerequisite: Keyboarding* recommended
Students develop or review correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheet, database, graphics, and telecommunications applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn to use software packages and local and worldwide network communications systems. Grade 8 Computer/Technology Standards of Learning are incorporated and reinforced in this course.
*Keyboarding course(s) or teacher-approved demonstrated and documented touch keyboarding skills

Digital Input Technologies 6160 (18 weeks)
Digital Input Technologies 6161 (36 weeks)
Grade Levels: 7, 8, 9 (18 weeks)
Prerequisite: Keyboarding* is recommended for 18-weeks course.
The Digital Input Technologies course introduces new and emerging tools that are quickly becoming standard in today's workplace. Students develop proficiency using Personal Data Assistants (PDAs), speech recognition software, and input tools for entering and manipulating text and data. The 36-week course offers secondary-level keyboarding skills.
*Keyboarding course(s) or teacher-approved demonstrated and documented touch keyboarding skills

Information Technology Fundamentals 6670
Grade Levels: 9, 10 (36 weeks)
Prerequisite: Keyboarding* is recommended.
Information Technology IT Fundamentals introduces the essential skills needed for students to pursue specialized programs leading to technical and professional careers and certifications in the IT industry. Students have an opportunity to investigate career opportunities in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. The focus of the IT Fundamentals course is on introducing skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.
*Keyboarding course(s) or teacher-approved demonstrated and documented touch keyboarding skills

Keyboarding 6151
Grade Levels: 9, 10, 11, 12 (18 weeks)
This course is designed for secondary school students to develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce personal, educational, and professional documents. (Students who can demonstrate touch keyboarding skills may test out and enter into the applications semester—6153—to develop document preparation skills.)

Keyboarding Applications 6152
Grade Levels: 9, 10, 11, 12 (36 weeks)
This course is designed for secondary school students to develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce a variety of personal, educational, and professional documents.

Keyboarding Applications 6153
Grade Levels: 9, 10, 11, 12 (18 weeks)
Prerequisite: Keyboarding (6150 or 6151)*
Students enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce a variety of personal, educational, and professional documents. (Students may enroll in this applications semester—6153—after successful completion of previous keyboarding coursework or a documented performance test/record of 6150 or 6151 competencies.)
*Keyboarding course(s) or teacher-approved demonstrated and documented touch keyboarding skills

Principles of Business and Marketing 6115
Grade Levels: 9, 10 (36 weeks)
Principles of Business and Marketing 6116
Grade Levels: 9, 10 (18 weeks)
Students explore the roles of business and marketing in the free enterprise system and the global economy. Students study how the American economy operates and prepare to make decisions as consumers, wage earners, and citizens.

Family and Consumer Sciences

Exploring Work and Family Roles
8204 Exploratory Grade 6
8206 Exploratory Grade 7
8208 Exploratory Grade 8
8241 Exploratory 6 weeks
8242 Exploratory 9 weeks
8243 Exploratory 12 weeks
8244 Exploratory 18 weeks
8245 Exploratory 36 weeks
The middle school exploratory courses provide a foundation for management of individual, family, work, and community roles and responsibilities. Students explore concepts and practice skills related to problem solving, leadership, interpersonal relationships, ethical practices, career interests, environmental issues, and high-quality work. Mathematics, science, language, social sciences, fine arts, and technology are integrated throughout the program. Exploring Work and Family Roles is the foundation for Family and Consumer Sciences programs on the high school level.

GRADS 8211/8212 (18/36 weeks)
Grade Levels: 6, 7, 8
Students enrolled in the **G**raduation, **R**eality, **A**nd **D**ual-role **S**kills Program (GRADS) concentrate on developing self-esteem; using effective communication skills; maintaining positive relationships; promoting wellness, prenatal, and postnatal care; evaluating the cost of parenthood; adjusting to parenthood; understanding child development; providing child care; managing family relationships; exploring careers; applying employability skills; managing economic resources and expenditures; and balancing work and family. Teachers highlight the basic skills of math and science when appropriate in the content.

Health and Medical Sciences

Health and Medical Sciences Exploratory 8370
Grade Level: Middle School (18 weeks, single period)
This course follows a complementary course such as Careers and You. Students explore families of health careers and related occupations, participate in self-awareness activities, and receive an overview of the national health industry. Course content may also include the criteria for entering certain biomedical scientific careers and activities dealing with communication, problem solving, and critical thinking.

Marketing

Make It Your Business 8109
Grade Levels: 6, 7, 8, 9 (6 weeks)
Make It Your Business 8112
Grade Levels: 6, 7, 8, 9 (9 weeks)
Make It Your Business 8113
Grade Levels: 6, 7, 8, 9 (12 weeks)
Make It Your Business 8114
Grade Levels: 6, 7, 8, 9 (18 weeks)
Students are provided opportunities to run a small group or class business based on their own design for providing a service or product needed at their school. They learn business terminology, basic entrepreneurship concepts, and fundamental business operating principles in this course. Design of course content allows for interdisciplinary instruction. Academic knowledge and skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

Technology Education

Careers and You 8475
Grade Levels: 5, 6 (9, 18, or 36 weeks, single period)
Elementary or middle school students may enroll in this course prior to taking career and technical or career exploratory courses. They investigate the 16 career clusters designated by the U.S. Office of Education by focusing on

- understanding oneself in relation to work
- understanding and simulating work styles

- identifying and simulating selected careers
- planning for future exploratory courses or activities.

Introduction to Technology 8483 (36 weeks)
Introduction to Technology 8482 (18 weeks)
Introduction to Technology 8484 (12 weeks)
Introduction to Technology 8481 (9 weeks)
Grade Level: 6
Students first study the basic elements of all technology, including processes, energy, information, and people. They explore up to four systems of technology, including construction, transportation, communication, and production/manufacturing. Finally, they relate the impact of technology on society, environment, and culture to future consequences and decisions.

Inventions and Innovations 8461 (36 weeks)
Inventions and Innovations 8464 (18 weeks)
Inventions and Innovations 8485 (12 weeks)
Grade Level: 7
Students make models of significant inventions that have advanced society. After studying these developments, they explore contemporary technological problems facing them, their community, or the world and apply systematic procedures to invent new products or innovations as solutions.

Technological Systems 8462 (36 weeks)
Technological Systems 8463 (18 weeks)
Technological Systems 8486 (12 weeks)
Grade Level: 8
Students combine resources and techniques into systems, realizing technology as a system. By simulating systems, assessing their impacts, and relating this experience to the two previous levels, students gain an insight into how to approach the problems and opportunities of a technological world in a broad sense. They also explore occupational areas and educational programs for technology-oriented careers.

Career Connections

Career Pathways Phase 1 (Career Exploration) 9070
Grade Levels: 6-12 (Time and schedule locally determined)
Phase 1 prepares students to be "career investigators." To obtain the title, students must assess their role in society, identify their role as a worker, analyze their personal assets, complete a basic exploration of career clusters and select career fields or occupations for further study, and secure a career investigator (job shadowing) position with a local employer.

Career Pathways Phase 2 (Career Skills) 9071
Grade Levels: 6-12 (Time and schedule locally determined)
Phase 2 consists of an in-depth study of one to four or more career clusters through a variety of investigative activities with local employers. Students observe, analyze, and report on the demand for workers, worker qualifications, organizational structures, quality control measures, selected policies and regulations, ethical issues, and rewards of work. Students who complete Phase 2 successfully qualify to become "career analysts."

Education for Employment (EFE)
Introduction 9075 (for Students Identified as Disadvantaged—18 weeks)
Introduction 9076 (for Students Identified as Disadvantaged—other than 18 weeks)
Introduction 9082 (for Students with Disabilities—18 weeks)
Introduction 9083 (for Students with Disabilities—other than 18 weeks)
Grade Levels: 6, 7, 8, 9
Students explore independent living and workplace skills by identifying individual assets, interests, aptitudes, talents, and current occupational abilities. Through practical experiences related to daily living and work, students determine strategies to improve their assets and ways to emphasize their strengths at home, school, and in the workplace.

ProTeam 9060/9061
Grade Level: 7 or 8
ProTeam is an exploratory class for students in grades 7 and 8 with a career interest in teaching and education. The curriculum is designed to help students set realistic goals that include the steps to prepare for successful completion of high school and college, including an emphasis on career development competencies. The eight course modules are *I Can Self-Reflect, I Can Communicate, I Can Teach Others, I Can Be Different, I Can Make Decisions, I Can Set Goals,* and *I Can Think Positively*. The course has an emphasis on service learning, cooperative work groups, teaching-like experiences, and family involvement. This program shall be articulated with a Teacher Cadet program at the high school.

Credit for High School CTE Courses Offered in Middle School

In addition to exploratory courses, school divisions may offer some career and technical courses to middle school students for high school credit. The courses must be the same length and taught with the same content as the courses taught at the high school level. Students should see the school counselor for a complete explanation of course offerings for credit.

- Basic Agricultural Mechanics and Plant Science 8006
- Basic Agricultural Mechanics and Animal Science 8008
- Career Pathways 9070/9071
- Computer Applications 6611
- Digital Input Technologies 6160/6161
- Principles of Business and Marketing 6115
- Principles of Business and Marketing 8115
- Keyboarding 6151/6152/6153
- Information Technology Fundamentals 6670
- Introduction to Health and Medical Sciences 8302
- Resource Management 8214/8219
- Geospatial Technology 8423
- Materials and Processes Technology 8433
- Technology Foundations 8403